USAID VIETNAM CLEAN ENERGY PROGRAM

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FIRST YEAR IMPLEMENTATION PLAN
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Executive Summary

The USAID Vietnam Clean Energy Program (the Program) is the flagship USAID initiative to promote a cleaner energy environment in Vietnam initiated in October, 2012. It's primary objective is to build capacity in Vietnam and strengthen the foundation for low emissions energy systems and contribute to the larger overall USAID goals of accelerating the Vietnam's climate resilience and achieve low emission sustainable development. VCEP will build low emissions energy systems in Vietnam through three program implementation areas:

> **Sub-IR 2.1 (Task 1):** Enhance capacity to acquire, manage, analyze, and use energy sector data in decision making
>
> **Sub-IR 2.2 (Task 2):** Increase energy efficiency in high energy use sectors
>
> **Sub-IR 2.3 (Task 3):** Increase public and private investment in and piloting of renewable energy technologies

The following document represents the Programs Year 1 Work Plan featuring the following highlights:

Task 1 focuses on enhancing the capacity of the Government of Vietnam to acquire, manage, analyze, and use energy sector data in decision making. The objective is to strengthen the capacity of government institutions to collect energy sector data, develop and maintain energy databases, and analyze, model, and use the results for energy planning and policymaking. The overall approach in this task will be to provide realistic and practical technical support and focused capacity-building that will lead to successful implementation of energy analysis for informed decision making. The VCEP Team will assist the Ministry of Industry and Trade's General Directorate of Energy in developing an effective energy assessment process based on international practice; will provide specific technical advice on energy data management, modeling and scenario development, and results frameworks; and will provide an unbiased and independent sounding board with respect to assessing policy decisions.

The needs assessment and foundational work in Year 1 will pave the way in Year 2 for implementation of a more integrated data collection and management system, with related capacity building support from the VCEP Team. It will also initiate discussion of the use of scenario analysis for policy development and analysis so that VCEP can support GDE in Year 2 to assess the potential impacts and cost effectiveness of alternative policy and regulatory actions to promote the scale of investment in energy efficiency, renewable energy, and other clean energy options, such as fuel switching.

The purpose of Task 2 is to strengthen the capacity of the Government of Viet Nam as well as in-country organizations and private sector stakeholders to increase energy efficiency through policies and regulations, and through market-transforming initiatives that spur investment and behavior change. Efforts under this task will focus on the efficiency of electricity use in the buildings sector, and will make the business case for energy efficiency to consumers and building owners, open financing channels, and build capacity for improved implementation of energy efficiency provisions and standards. The overarching objective for Year 1 is to coordinate with a wide range of agencies and organizations that are already active in these areas, in order to build a strong foundation of knowledge about current and planned energy efficiency activities in Viet Nam and to lay the groundwork for VCEP activities that will build on these effectively. Toward this goal, the Year 1

activities focus on assessing current energy efficiency policies and programs -- in the buildings sector (particularly with regard to Viet Nam's revised building code), and in the areas of market incentives, demand-side management and end-use energy efficiency, and training in building energy efficiency – and then identifying remaining needs and opportunities, and developing Action Plans and Road Maps for activities in Years 2-5 (and beyond).

Task 3 focusses on improving the investment climate for Renewable Energy Climate through and assessment of opportunities in specific areas including biomass, biogas, solar, and agricultural waste utilization for energy generation, the enhancement of the market for such technologies through the introduction of proven and bankable technical solutions, and improvement of the market through policy enhancement and calculation of feed-in tariffs which will guarantee economic viability. During the first year, the Program will initiate the creation of a pipeline of potentially bankable projects, perform feasibility studies, identify needed policy initiatives to demonstrate a set of conditions needed to encourage the public and private sector to invest in Renewable Energy projects. In addition, the Program intends to identify off grid opportunities and develop proposals for one or two selected communities to start generating their own electricity through renewable energy technologies and advance the communities' economic development.

This ground laying work will be followed up in Years 2, and three with implementation of renewable energy projects through continued hands-on work with project developers, investors and financiers who will received training in development and project finance.

Another focus of Task 3 will be the training of government officials, private sector stakeholders, regulators and the public in general in the advantages to be gained from the utilization of Renewable Energy. Special training and implementation focus will given to women, disadvantages persons and minorities in the selection of projects to be implemented and capacity enhancement for governance, development companies and financiers.

Efforts against these three tasks will be coordinated by the Program management staff to be mindful and be coordinated with other donor efforts through regular interaction. It is our intent not to duplicate Government of Vietnam and other donor activities, but to identify opportunities within the total needs framework and to jump in where there are missing pieces in the puzzle leading to a better understanding of the energy environment and planning for the future, demonstrating ways to reduce energy demand through savings and efficiency and to create a cleaner energy environment through the use of Renewable Energy in Vietnam.

Below is a summary of the USAID Vietnam Clean Energy Program Year 1 major deliverables:

Table 1. VCEP Year 1 Targets

Task 1	**Major Year 1 Deliverables**
Enhance capacity to acquire, manage, analyze, and use energy sector data in decision making	• Workshop on the Design and Use of Scenarios in Energy Modeling and Analysis – July 2013 • Workshop on planning and policy development for clean energy, targeted at provincial officials, NGOs, academics, and developers – September 2013

Task 2 Increase energy efficiency in high energy use sectors	• Buildings Sector Energy Efficiency Action Plan • Roadmap for Demand-Side Management and End-Use Energy
Task 3 Increase public and private investment in and piloting of renewable energy technologies	• Resource Assessments for a variety of fuels and project opportunities of varying technologies • Project feasibility studies • Training in Renewable Energy subjects, policy and project development

YEAR 1 BUDGET. The USAID budget for the implementation of VCEP activities in Year 1 is $3,049,920.00

YEAR 1 STARTUP ACTIVITIES

Setting Up of Physical Offices. The USAID Vietnam Clean Energy Program office moved into its permanent facilities on December 15, 2012 at 20/52 To Ngoc Van, Tay Ho District, Hanoi, Vietnam.

Management Structure and Staffing. Winrock International's management team for VCEP is composed of: a Chief of Party (COP), a Deputy Chief of Party (DCOP); and component managers for Task 1, Data Gathering, Task 2, Energy Efficiency and Task 3, Renewable Energy. All these personnel have been officially hired. Other program and administrative staff include: communications/outreach specialist, accounting/finance manager, monitoring and evaluation specialist, office manager, administrative assistant, and driver/messenger.

The management structure of VCEP is shown in Annex A.

Partnership Meetings. Initial coordination meetings are being scheduled during the first two quarters of the year for the purpose of defining and assigning roles of Subcontractors and Program Partners.

Winrock has been coordinating regularly with main sub-contractors Nexant and Alliance to Save Energy since they were officially approved by USAID to work on the program. They participated directly in the drafting of this work plan. Winrock has also been coordinating with Enerteam, which has likewise been officially approved as a sub-contractor, and other proposed subs SRC Global, DMP Resources, SNV Vietnam, and Full Advantage. Winrock is waiting on additional documentation from SRC Global, SNV Vietnam, and Full Advantage, and will formally submit them for consideration to USAID before the end of January 2013.

VCEP Branding Strategy and Marking Plan. A branding strategy and marking plan was developed during the proposal and refined prior to contract award. Recently, the Program received approval

of its proposals for letterheads and business cards. Other items requiring approval, like brochures, newsletter formats will be subject to USAID approval within the next few months, as needed.

M&E Work Plan Development. The Monitoring and Evaluation (M&E) Work Plan will be submitted within 30 days after USAID Work Plan approval and discussions with USAID on which indicators will best reflect the Programs progress and successes.

Anticipated Challenges. The Program requires approval by the Ministry of Planning and Ministry of Industry and Trade. We have been informed that this process my take anywhere from three to twelve months. The initial draft application was submitted on behalf of USAID to the Ministry of Industry and Trade on January 2, 2013 in accordance with Government Decree 131. While USAID and the Program will do everything in their power to expedite the process, it will be difficult to work with a number of our government counterparts during the approval process, which may delay implementation of many activities requiring government involvement in this Work Plan.

I. Introduction

On October 1, 2012, the United States Agency for International Development (USAID) awarded Winrock International a five year contract to implement the USAID Vietnam Clean Energy Program (the Program). Winrock, in its proposal to USAID, included in its team two main partners Nexant, Inc. and the Alliance to Save Energy, along with DMP Resources, SRC Global, Enerteam, SNV Vietnam, and Full Advantage.

The goal of VCEP is to build capacity in Vietnam and strengthen the foundation for low emissions energy systems and contribute to the larger overall USAID goals of accelerating the Vietnam's climate resilience and achieve low emission sustainable development. VCEP will build low emissions energy systems in Vietnam through three program implementation areas:

- Sub-IR 2.1 (Task 1): Enhance capacity to acquire, manage, analyze, and use energy sector data in decision making
- Sub-IR 2.2 (Task 2): Increase energy efficiency in high energy use sectors
- Sub-IR 2.3 (Task 3): Increase public and private investment in and piloting of renewable energy technologies

For each of the three program implementation areas, Winrock has identified leads, supporting partners, and strong short term experts.

These are as follows:

Task 1, Data Management: Nexant leads, DMP Resources supporting

Task 2, Energy Efficiency: Alliance to Save Energy leads, SRC Global and Enerteam supporting

Task 3, Renewable Energy: Winrock leads, SNV Vietnam and Full Advantage supporting

Winrock has also identified long-term staff who will support all three areas in a cross cutting manner.

Activities under VCEP will support USAID's goal of accelerating Vietnam's transition to climate-resilient, low-emission, sustainable development. In addition to meeting all VCEP objectives, Winrock will:

- Build Vietnamese knowledge, awareness, and analytical capacity for government agencies, developers, communities, organizations, financing institutions, and the private sector to sustain the USAID Vietnam Clean Energy Program's innovations and momentum in partnership with Ministry of Industry and Trade (MOIT) and Vietnam's Institute of Energy (IE).
- Develop replicable and scalable energy pilots to increase people's ability to understand and fine-tune what works in the Vietnamese environment, collaborating with the MOIT, US Department of Energy, the Energy Institute, Vietnam Electricity (EVN), Vietnam Green Building Council, and Vietnam Women's Union (Energia's focal point in Vietnam).
- Secure partnerships and leverage resources in collaboration with Vietnam's private building sector, other US government partners, communities, other donors, and the private sector, including MOIT, the Ministry of Construction, World Bank, International Finance Corporation, academia, and building management experts in Vietnam and international partners and resources available to the Program.

Winrock will strengthen the capability of MOIT to scale up the Vietnam National Energy Efficiency and Conservation Program to select, design, evaluate and encourage investments in the residential and commercial building sector. Executed in concert with EECO, Electricity of Vietnam (EVN), Electricity Regulatory Authority of Vietnam (ERAV), and municipal and private partners, the Program will provide opportunities to vet and refine energy efficiency incentive models and design replicable models for attracting private support and "last mile" renewable energy electrification in off-grid communities. The Program provides a hands-on approach to building the institutional and regulatory capacity through policy studies, pilot projects, and demonstration evaluations. The Winrock Team supports USAID, MOIT, and General Directorate of Energy in developing, managing, and maintaining its energy sector data and using it effectively to monitor EE and RE performance, identify high-value project opportunities, and conduct policy analysis through international technical assistance and linkage with other countries' best practice networks.

II. Program Overview

General Program Description

The overall goal of USAID's climate change program in Vietnam is to accelerate Vietnam's transition to climate resilient, low emission, sustainable development. To achieve this goal, USAID's climate change program in Vietnam will seek to achieve the following Intermediate Results (IRs):

- IR 1: Enhance the capacity for economy-wide low emission development strategies
- IR 2: Strengthen the foundation for low emissions energy systems
- IR 3: Support adoption of land use practices that slow, stop and reverse emissions from deforestation and degradation of forests and other landscape
- IR 4: Increase resilience of people, places and livelihoods in delta areas through assistance for adaptation and disaster risk management

The Vietnam Clean Energy Program (VCEP) is USAID Vietnam's primary mechanism to accomplish IR 2.

The USAID Vietnam Clean Energy Program is USAID Vietnam's core bilateral program to accomplish the Intermediate Result of strengthening the foundation for low emissions energy systems. To complement the Program, USAID Vietnam coordinates technical assistance activities of the U.S. Department of Energy National Labs Consortium (DOE Labs) and regional USAID programs.

VCEP supports clean energy development (i.e., increased use of renewable energy technologies and energy efficiency practices). VCEP also complements the U.S. Government's Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) program by building Vietnamese capacity in energy data management and analysis for pol icy making. VCEP targets specific energy end-use sectors as described below to abate greenhouse gas emissions and promote increased public and private investment in clean energy technologies. Where synergistic, the program also contributes to relevant development objectives of the GVN such as poverty reduction, private sector-led growth, energy security and energy access.

The program makes strategic interventions to strengthen the technical capacity of government officials, private sector actors, and national policy regimes that directly influence and catalyze investment in clean energy technologies, practices, and policies. Through these interventions, the program shall result in tangible reductions in greenhouse gas emissions over the short and long term by creating a facilitative investment, decision-making, and operational climate for private and public sector participation in the clean energy sector.

III. Main Program Activities and Anticipated

Mobilization. To date, the VCEP Team has worked to provide rapid and effective Program mobilization. This included leasing and equipping office space, mobilizing the COP, hiring local staff including the DCOP, hiring program administrative staff, hiring Task 2 (Energy Efficiency) and Task 3 (Renewable Energy) Leads, Communications and M&E Specialists. The Task 1 (Data Gathering) was recently approved by USAID and will join the team shortly.

Winrock has been working with USAID to obtain sub-contractor approval for Task 1 Lead, Nexant, Inc. and to date received sub-contractor approval. However, full approval of their staff is still outstanding. Sub-recipient Alliance to Save Energy (ASE), Task Lead for Task 2, Energy Efficiency, received full approval in December 2012, and their Task Leader joined the Program Team on January 2, 2013.

One other sub-recipient, DMP Resources, contributor to Task 1 (Data Gathering) received USAID approval and is now working with Nexant to define specific tasks for which it will take responsibility under Task 1.

Sub-recipient SRC Global, contributor to Tasks 1 and 2 (Energy Efficiency) is awaiting USAID approval shortly. SRC will then work with the major sub-recipients, Nexant and ASE to define specific tasks to be performed.

Three local sub-recipients, SNV, Enerteam and Full Advantage, contributors to Tasks 2 (Energy Efficiency) and Task 3 (Renewable Energy) are now in the process of having their approval applications prepared.

An application for Government of Vietnam approval for this ODA Technical Assistance Project, following the procedures outlined in Government Decree 131, was submitted to the Ministry of Industry and Trade. Filing of the initial application will be followed by discussions on the modus operandi and work plan of this Program. Final approval is expected to take between three to twelve months.

Many planned year one activities are designed to assess capacity in Vietnam and lay the groundwork for strategic interventions, pilots, projects, trainings, and policy solutions that will be implemented later in the project.

Task 1 (Sub-IR 2.1): Enhance capacity to acquire, manage, analyze, and use energy sector data in decision making

This task will be led and carried out by Nexant, under the management of Winrock. DMP Resources will contribute to this task as well. The purpose of Task 1 is to strengthen the capacity of Government of Vietnam institutions to collect energy sector data, develop and maintain energy databases, and analyze, model, and use the results for energy planning and policymaking. An additional purpose is to strengthen Government of Vietnam understanding of the impact of various clean energy policies, programs, and initiatives.

During Year 1, the program aims to:

- Develop a clear understanding of the General Directorate of Energy[1] staff capabilities and needs;
- Initiate efforts to strengthen and expand data management and modeling efforts in Vietnam;
- Map and define decision-making frameworks and alternative processes; and
- Initiate establishment of an energy information network involving the key Government of Vietnam agencies, in close coordination with other donors.

Approach and Methodology

The overall approach in this task will be to provide realistic and practical technical support and focused capacity-building that will lead to successful implementation of energy analysis for informed decision making. The Winrock team will seek to act as an unbiased and independent monitor in the development of the decision-making process. This will provide the Government of Vietnam the ability to monitor progress towards effective decision-making. The Winrock Team will accomplish this by:

- assisting the General Directorate of Energy in developing an effective energy assessment process based on international practice;
- providing specific technical advice to the General Directorate of Energy on energy data management, modeling and scenario development, and results frameworks; and
- providing an unbiased and independent sounding board with respect to assessing policy decisions.

The assistance will directed by the Task Leader, Dr. Nguyen Anh Tuan, with assistance from the Senior Task Advisor, Wayne Mikutowicz. The Task Leader will liaise with the Ministry of Industry and Trade, including its General Directorate of Energy, the Institute of Energy, and other stakeholders in providing guidance on energy information, analysis and decision making. The Senior Task Advisor will direct the subject area experts from the Nexant VCEP team to manage, assist, respond and implement specific tasks as identified in the execution of this work plan.

[1] GDE is in the Ministry of Industry and Trade.

Scope of Work

This program area has three sub tasks:

- **Task 1.1.** Enhance National and Local Capacity to Collect and Manage Energy Data
- **Task 1.2.** Enhance Capacity for Modeling and Analysis of Low Emission Energy Policy Scenarios
- **Task 1.3.** Support the Use of Energy Data and Analytical Results in Decision Making

The proposed first year plan to address each of these three tasks is set out below.

Task 1.1: Enhance national and local capacity to collect and manage data

The objectives of this task are to:

- Support the development or enhancement of institutional arrangements, databases, and the capacity of the Government of Vietnam to systematically collect quality energy data, keep it up-to-date, and share it with relevant stakeholders in a way which will be proven to be user-friendly and understandable to the end-users.
- Support development of capacity and systems to monitor the emission reduction impacts of clean energy, policy, programs, and initiatives as well as their impacts on poverty, youth employment, gender equality, and health.
- Ensure that the Government of Vietnam has a plan and approach in place for sustainability of the systems and practices.

This task has four main sub-tasks:

- Task 1.1.1: Conduct needs assessment of existing data base systems
- Task 1.1.2: Support improvements in data collection techniques
- Task 1.1.3: Improve data management and distribution systems
- Task 1.1.4: Build capacity for data collection and management

Task 1.1.1: Conduct needs assessment of existing database systems

The purpose of this task is to assessing capacity and gaps in the current and planned processes for energy data collection and management, and to also recommend improvements in these processes. The needs assessment will have the following elements:

- Meet with Ministry of Industry and Trade, including the General Directorate of Energy, the Institute of Energy, the General Statistics Office, and other stakeholders to seek buy-in and review data collection and management processes being used and the role these will play in decision-making
- Establish evaluation criteria – focus on
    - Data scope and collection issues
    - Data management processes
    - Quality control
    - Staff capacity

- Assess the current energy data collection and management processes and techniques based on internal needs and external benchmarks
- Develop the desired changes to improve the system and action plan and cost
- Present the results to Ministry of Industry and Trade, including the General Directorate of Energy, the Institute of Energy, the General Statistics Office, and other stakeholders

The results of the needs assessment will feed into and guide the implementation of the remaining activities under this task, which are described below.

Deliverables/Results and Timing

1. Energy Data Needs Assessment Report – March 2013
2. Presentation of results – March 2013

Task 1.1.2: Support improvements in data collection techniques

The purpose of this work stream is to improve and expand the data collection conducted by the General Director of Energy, the General Statistics Office, and others. The Winrock Team will build on what has been provided by other donors. This task will involve the following sub-tasks:

- Improve existing data collection: this task will be based on the needs assessment, with the objective to ensure that data collection techniques are consistent and robust. The following activities will be undertaken:
  - Design changes to supplement gaps in collection and measurement of energy supply data
  - Design changes to collection and measurement of energy demand data based on identified data gaps
  - Recommend an improved data collection template and techniques based on best applicable international practice
- Enhance energy databases - this task will be based on the needs assessment, with the aim to build out relevant energy databases and incorporate new requirements. It will have these components:
  - Recommend changes to procedures for collecting data including energy efficiency and renewable energy, and for monitoring trends over time
  - Design a method and template to collect and measure impact of clean energy initiatives in terms of reduced fossil energy use and emissions reductions
  - Define processes for the collection of renewable energy data, and coordination in the way it is managed and incorporated into energy databases

Deliverables/Results and Timing

1. Report on alternative energy data templates provided for energy demand information and emission reductions – May 2013
2. Report on alternative energy data template for energy supply information and emission reductions – May 2013

3. Report on procedures for collecting and monitoring changes in energy efficiency and renewable energy – June 2013

Task 1.1.3: Improve data management and distribution systems

The purpose of this work stream is to improve and expand the data management systems used by the General Director of Energy and the ease with which the data can be accessed by other stakeholders. In the first year, this task will focus on enhancing and improving current systems, and will involve the following steps:

- Develop agreement on organizational and institutional arrangements for data management. In this task, Nexant will assess the existing arrangements; identify strengths and weaknesses; and identify alternative approaches that would be consistent with the need to enhance data collection and management and respond to the need to clean energy policies.

- Identify alternatives for data management systems. Depending on the needs assessment and the current methods used for data management, this sub-task will focus on identifying alternative data management systems, which can facilitate the entry, manipulation, and sharing of energy data and its integration into other Government of Vietnam data systems. The assessment will involve compatibility with existing systems, review of benefits and costs, and specific recommendations for implementation.

- Review and enhance quality assurance. This sub-task includes two components:

    - Conduct a first-year audit of data quality; and

    - Commence initial development of a framework process for quality assurance.

Deliverables/Results and Timing

1. Report on recommended improved data management systems and implementation plan – August 2013

2. Quality assurance audit – September 2013

3. Quality assurance manual – September 2013

Task 1.1.4: Build capacity for data collection and management

The Winrock Team will deliver capacity building and training in the key areas where gaps and weaknesses are identified in the needs assessment. The capacity building will be delivered through workshops and specific instruments such as “hands-on” training, mentoring, and informal seminars. To the extent possible, the capacity building will be delivered using examples of successful data management systems in other countries. The following activities are planned:

- Assess training needs;

- Develop training plan and modules; and

- Provide one workshop on data management to government and university participants in the first year.

Deliverables/Results and Timing

1. Training Needs Assessment Report (with proposed training plan for the balance of the project) – May 2013

2. Presentation of results – June 2013

3. Workshop on data collection and management systems and practice – September 2013

Task 1.2: Enhance capacity for modeling and analyzing low-emission energy policies
The requirements for this task are to:

- Build skills and capacity within government and academic institutions to perform data-driven analyses and modeling, in order to compare alternative policies that affect energy use, emissions, and development outcomes.
- Deliver high priority economic, policy, social, and operational impact analyses as identified by the Government of Vietnam and USAID through collaborative approaches that build Vietnamese capacity

This task has four main sub-tasks:

- Task 1.2.1: Assess needs of existing modeling systems
- Task 1.2.2: Improve modeling capabilities
- Task 1.2.3: Targeted Impact Assessment using Low Emissions Policy Scenarios (Optional Task
- Task 1.2.4: Build capacity for energy modeling and analysis

Task 1.2.1: Needs assessment of existing modeling systems
The purpose of this task is to assess what energy modeling processes are currently being used or are in development; identify weaknesses and gaps; and recommend what types of improvements could be made. The energy modeling needs assessment will have the following sub-tasks:

- Meet with the Ministry of Industry and Trade, including the General Director of Energy, the General Statistics Office, the Institute of Energy, and other stakeholders to seek buy-in and review modeling processes being used, and the role these will play in decision-making
- Establish evaluation criteria based on internal needs and external benchmarks
- Assess the current energy modeling capabilities based on an inventory of current models used (e.g. supply side, demand, sector wide, policy oriented) and analysis techniques. Identify the desired changes to improve the system
- Develop action plan and cost of implementation
- Presentation of the results

The results of the needs assessment will feed into the remaining tasks described below.

Deliverables/Results and Timing

1. Energy Modeling Needs Assessment Report – April 2013

2. Presentation of results – April 2013

Task 1.2.2: Improve modeling capabilities

The purpose of this task is to improve and expand Government of Vietnam modeling capabilities in line with the findings of the needs assessment. The principle focus will be on enhancing the ability to model and assess alternative energy policies that impact energy use, emissions and economic development. The task will include the following elements:

- Review processes used to capture and model policy alternatives by the Government of Vietnam and at other key institutions – these will include data specification, development of assumptions, model compatibility, and interpretation of outputs
- Identify specific alternative model requirements (as well as their compatibility with current and purposed energy data collection) that will be needed in order to assess the impacts of low-emission, demand-side policies; risk measurement techniques; and their costs and impacts. The anticipated result for Year 1 will be to recommend specific improvements in modeling approaches; and in coordination with the General Directorate of Energy, related Government of Vietnam agencies, and key donors, to clarify the rationale for the adoption of alternative models and agree on an implementation plan.
- Identify specific training needs of Government of Vietnam staff in order to undertake the enhanced modeling. The expected outputs will be a training development plan for staff of the General Director of Energy, and identification of high-performance staff who are willing to participate in collaborative-based communities and forums to enhance their skills.

Deliverables/Results and Timing

1. Report on alternative model requirements – July 2013
2. Testing and evaluation of selected alternative modeling approaches – September 2013
3. Plan for modeling forums and VN staff involvement – September 2013

Task 1.2.3: Targeted Impact Assessment using Low Emissions Policy Scenarios (Optional Task)

While the majority of effort in year one will be spent ensuring that the right data analysis and modeling tools are in place, it may be possible to undertake a narrowly defined impact analysis. This is designated an optional task as it will depend on the status of the previous tasks and the perceived need and desire by the General Director of Energy to conduct the assessment. The purpose of this task is to conduct, in close collaboration with staff of the General Directorate of Energy, a specific impact analysis, which will be jointly agreed upon by the Government of Vietnam and USAID. This task includes the following sub-tasks:

- Define and specify problem. Based on the specific request, the first action would be to specify the problem to be addressed and develop appropriate assumptions/scenarios. These would reviewed to insure agreement
- Carry out analysis. The next step would be to conduct the assessment using the appropriate tools, depending on the nature of the assessment. This could range from a narrowly defined economic assessment for a specific sector to a broader macro assessment and analysis.
- Generate results. The next step will be to assess the range of results for consistency, accuracy, and value to the decision making process, and if needed, to re-run the analysis.
- Present report. The final step will be to present the results to the appropriate parties.

Deliverables/Results and Timing

1. Conduct one impact assessment – July to September 2013

Task 1.2.4: Build capacity for energy modeling and analysis
The VCEP Team will deliver capacity-building and training as required in the areas described in the Energy Modeling Needs Assessment (see Task 2 under this task), through workshops and specific instruments such as "hands-on" training, mentoring, and informal seminars. The focus of capacity building task in Year 1 will be on as follows:

- Based on the Energy Modeling Needs Assessment, design a training module for energy modeling and analysis which would be implemented in year 2.
- Conduct a workshop on scenario development
- Identify twinning partners and initiate arrangements

Deliverables/Results and Timing

1. Draft training module – June 2013
2. Final training module (ready for roll out) – July 2013
3. Workshop on the Design and Use of Scenarios in Energy Modeling and Analysis – July 2013

Task 1.3 Support the use of energy data and analysis in decision making
The objectives of this task are to:

- Enhance the capacity of Government of Vietnam officials and industry leaders to utilize sectoral data and analytical results in policy development.
- Build capacity for the use of appropriate data and analyses that support increased deployment of clean energy in the design of new energy sector policies, targets, and plans.
- Ensure that decision-makers are aware of, and make use, of the enhanced data and modeling capabilities and outputs.

This task has three main sub-tasks:

- Task 1.3.1- Support design of an improved decision-making framework
- Task 1.3.2: Provide technical support for policy decisions
- Task 1.3.3: Build analytical capacity and conduct outreach

Task 1.3.1- Support design of an improved decision-making framework
The objective of this task is to better understand the decision-making process and the use of energy data and model outputs. An additional objective is to provide guidance to decision-makers on the how to benefit from available analyses, and to provide a framework for addressing clean energy policy issues. Good processes will lead to good decisions.

This task has the following sub-tasks:

- Mapping of the policy and decision process. The purpose of this sub-task is to thoroughly understand how energy policy decisions are made. This will require meeting with key personnel throughout the Government of Vietnam as well as others who provide significant inputs into the decision-making process. It will be important to assess how the process works – e.g., whether it is a fixed process, or a flexible process where options are identified and updated based on new information. Nexant will then develop a process map for decision-making and make recommendations for improvement.

- Use of decision tools. The purpose of this sub-task will be to increase the awareness among decision-makers of the tools available to them, such as risk analysis, problem-tree analysis, and scenario development through selected interventions. This will be accomplished through a workshop

Deliverables/Results and Timing

1. Report on Energy Policy and Planning Decision Framework and Use of Scenario Analysis – August 2013

2. Presentation of results – August 2013

Task 1.3.2: Provide technical support for policy decisions

The purpose of this work stream is to provide technical support for specific policy study requests, based on improvements in scenario development and modeling outputs. This task will be limited in the first year, until the Vietnam Clean Energy Program has a fuller understanding of the capabilities of the General Directorate of Energy and Institute of Energy; however, we would be responsive to specific requests.

This task has the following sub-tasks:

- meet with MOIT to define request;
- develop assessment approach and review with MOIT;
- conduct analysis and develop a decision document incorporating the use of scenario analysis and risk assessment; and
- present results to MOIT.

Deliverables/Results and Timing

1. Conduct at least one study to support policy decisions related to clean energy development – September 2013

Task 1.3.3: Build analytical capacity and conduct outreach

The purpose of this work stream is two-fold: first, to build the capacity of decision-makers to utilize and understand analytically based policy development; and second, to ensure that VCEP is being inclusive in the conduct of its work. The Winrock Team wants to ensure that all relevant stakeholders are aware of the developments and improvements taking place.

This task includes the following sub-tasks:

- Design and implement workshop on scenario development and analytical-based policy-making
- Develop study tour plan for Years 1 and 2
- Develop detailed plan for one study tour in Q1 of FY14
- Quarterly coordination meetings with MOIT and donors
- Periodic meetings with NGOs and other stakeholder groups on clean energy issues
- Proposed quarterly newsletter that highlights the latest energy information and results

Deliverables/Results and Timing

1. Workshop on planning and policy development for clean energy, targeted at provincial officials, NGOs, academics, and developers – September 2013

2. Three Donor Coordination Meetings – April, July, October 2013

3. Study tour plan submitted and approved (study tour to be conducted during Q1 FY 14) – September 2013

4. First quarterly newsletter on energy information and activities – September 2013

Task1: Enhance capacity to acquire, manage, analyze, and use energy sector data in decision making

Year 1 Work Plan: January – September 2013

Summary Table

Task	Sub-Task	Deliverable	Due Date	Partners
1.1 Enhance national and local capacity to collect and manage data	1.1.1. Conduct needs assessment of existing data base systems	1. Energy Data Needs Assessment Report 2. Presentation of results	March/2013 March/2013	Nexant, MOIT, GDE, GSO, IE
	1.1.2. Support improvements in data collection techniques	1. Report on alternative energy data templates provided for energy *demand* information and emission reductions 2. Report on alternative energy data template for energy *supply* information and emission reductions 3. Report on procedures for collecting and monitoring changes in energy efficiency and renewable energy	May/2013 May/2013 June/2013	Nexant, MOIT, GDE, GSO, IE
	1.1.3. Improve data management and distribution systems	1. Report on recommended improved data management systems and implementation plan 2. Quality assurance audit 3. Quality assurance manual	August/2013 September/2013 September/2013	Nexant, MOIT, GDE, GSO, IE

Task	Sub-Task	Deliverable	Due Date	Partners
	1.1.4. Build capacity for data collection and management	1. Training Needs Assessment Report (with proposed training plan for the balance of the project) 2. Presentation of Results 2. Workshop on data collection and management systems and practice	May/2013 June/2013 September/2013	Nexant, MOIT, GDE, GSO, IE, Provincial Gov.
1.2 Enhance capacity for modeling and analysis of low-emission energy policies	1.2.1. Assess needs of existing modeling systems	1. Energy Modelling Needs Assessment Report 2. Presentation of results	April/2013 April/2013	Nexant, MOIT, GDE, IE, EVN, MIP
	1.2.2. Improve modeling capabilities	1. Report on alternative model requirements 2. Testing and evaluation of selected alternative modelling approaches 3. Plan for modelling forums and VN staff involvement	July/2013 September/2013 September/2013	Nexant, MOIT, GDE, IE, EVN, MIP, Universities
	1.2.3. Targeted Impact Assessment using Low Emissions Policy Scenarios (Optional Task)	1. Conduct one impact assessment	July – September/2013	Nexant, MOIT, GDE, IE, MIP

Task	Sub-Task	Deliverable	Due Date	Partners
	1.2.4. Build capacity for energy modeling and analysis	1. Draft Training module 2. Training module ready for roll out 3. Workshop on the Design and Use of Scenarios in Energy Modelling	June/2013 July/2013 July/2013	Nexant, MOIT, GDE, IE, EVN, MIP, Universities
1.3 Support the use of energy data and analysis in decision making	1.3.1. Support design of an improved decision-making framework	1. Report on Energy Policy and Planning Decision Framework and Use of Scenario Analysis 2. Presentation of results	August/2013 August/2013	Nexant, MOIT, GDE, IE,
	1.3.2. Provide technical support for policy decisions	1. Conduct at least one study to support policy decisions related to clean energy development	September/2013	Nexant, MOIT, GDE, IE,
	1.3.3. Build analytical capacity and conduct outreach	1. Workshop on planning and policy development for clean energy, targeted at provincial officials, NGOs, academics, and developers 2. Three Donor Coordination Meetings 3. Study tour plan submitted and approved (study tour to be conducted during Q1 FY 14) 4. First quarterly newsletter on energy information and activities	September/2013 April, July, Oct/2013 September/2013 September/2013	Nexant, MOIT, GDE, IE, Donors, and NGOs, provincial governments, universities

Task 2 (Sub-IR 2.2): Increase energy efficiency in high energy use sectors

The purpose of Task 2 is to strengthen the capacity of the Government of Vietnam as well as in-country organizations and private sector stakeholders to increase energy efficiency in Vietnam's high energy-use sectors through policies and regulations, and through market-transforming initiatives that spur investment and behavior change. Efforts under this task will focus on the efficiency of electricity use in the residential and commercial/public building sectors, and will make the business case for energy efficiency to consumers and building owners; open applicable financing channels; and build capacity for improved implementation and enforcement of the Government of Vietnam's energy efficiency provisions and standards. This task will be led by Alliance to Save Energy, with support from Enerteam, SRC Global and Full Advantage. Nexant will also provide some inputs. This task consists of four sub-tasks:

Task 2.1 Demonstrate Models of Economically Viable Energy Efficiency Projects

Task 2.2 Pilot Market Incentive Programs for Energy Efficiency Practices

Task 2.3 Demonstrate Energy Demand Management and End-Use Efficiency Practices and Technologies

Task 2.4 Enhance Professional Technical Capacity Related to Energy Efficiency Practices

Task 2.5 Carry out Energy Efficiency building demonstration projects

Task 2 Approach and Methodology

The VCEP Team's overall approach will be to provide technical support and focused capacity building that will lead to improved energy efficiency planning, investment, and project implementation in Vietnam, focusing primarily on the residential and commercial/public building sectors. The Winrock team will accomplish this by:

- Assessing efforts to date by the Government of Vietnam, international donors, and other stakeholders to improve energy efficiency policies and programs in Vietnam;
- Providing technical support to the Ministry of Industry and Trade and its General Directorate for Energy, the Ministry of Construction, Electricity of Vietnam Group, Electricity Regulatory Authority of Vietnam and other key Ministries and agencies in identifying gaps in this area and developing strategies for achieving energy savings through energy efficiency measures (i.e. the rational use of energy); and
- Leveraging ongoing Government efforts as well as donor and private sector resources to bring about widespread improvements in energy efficiency throughout Vietnam.

These efforts will be led by the project's Energy Efficiency Manager, who will coordinate with Enerteam and other local subcontractors, institutions, and private sector partners, as well as the Ministry of Industry and Trade, the Ministry of Construction, Electricity of Vietnam Group, and other stakeholders in carrying out the Task 2 activities. The Energy Efficiency Manager will work with other project staff to convene an *Energy Efficiency Buildings Sector Advisory Committee* composed of key government officials, developers and other stakeholders, including representatives of the peoples' committees of major provinces and cities. The Energy Efficiency Building Sector Advisory Committee will meet 1-2 times per year to provide feedback on the Task 2 activities and other related project efforts, and its input will be coordinated closely with the national steering committee for the Vietnam National Energy Efficiency Program chaired by the Ministry of Industry and Trade. The schedule for organizing and convening the Energy Efficiency Building Sector Advisory Committee during Year 1 is:

- Role/function of the Energy Efficiency Building Sector Advisory Committee defined - February
- List of proposed Energy Efficiency Building Sector Advisory Committee members completed - March
- List of agreed Energy Efficiency Building Sector Advisory Committee members finalized - June
- First Energy Efficiency Building Sector Advisory Committee meeting - August

Year 1 Major Deliverables

In addition to the establishment of Energy Efficiency Building Sector Advisory Committee, the expected deliverables to the United States Agency for International Development and the Ministry of Industry and Trade in Year 1 include the following:

- Evaluation and needs assessment reports for each work area
- Buildings Sector Energy Efficiency Action Plan
- Building Market Incentive Gap Analysis
- Roadmap for Demand-Side Management and End-Use Energy Efficiency
- Report of Preliminary Results of Demonstration Project in Municipal Water Facility
- Building Energy Efficiency Training Program Plan
- Other reports as defined in this Work Plan.

Scope of Work

Cross-cutting Task: *Vietnam Energy Efficiency Policy and Program Review*

This review will be carried out during the first quarter of the project with the objective of providing the team with an overview of Vietnam's current energy efficiency policies and programs, including VNEEP, the Law on Energy Efficiency and Conservation, the new national building code and Vietnam's Construction Standards, implemented projects funded by various donors, all policies and programs discussed during the June 2009 Asia Pacific Economic Cooperation's Peer Review of Energy Efficiency program and the follow-up Peer Review of Energy Efficiency in February/March of 2012. The review will also provide an analysis of constraints and opportunities for improving energy efficiency in the key energy-using sectors in Vietnam that will be the focus of the United States Agency for International Development's Vietnam Clean Energy Program Task 2.

This review will be carried out through collaboration of numerous team members (including Enerteam and SRC Global), in close consultation with the Ministry of Industry and Trade and the Ministry of Construction, as well as donors such as the World Bank/International Financing Corporation.

Deliverables/Results and Timing

1. Updated report on Vietnam's energy efficiency policies and programs, and analysis of constraints and opportunities – February 2013

Task 2.1: Demonstrate Models of Economically Viable Energy Efficiency Projects

This task will support project developers (including construction companies, Government of Vietnam project managers, and organizations interested in energy efficiency project implementation) by providing information about energy efficiency opportunities, building the capacity of these stakeholders to develop viable projects, and facilitating access to financing. The specific requirements for this task are to:

- Raise the awareness of project developers about green building and energy efficiency practices.
- Ensure that project developers have increased knowledge about viable project development and financing for energy efficiency projects.
- Enhance the availability of project developers to develop bankable projects that will be economically viable.
- Ensure that developers have opportunities to access financing, including through connections with the Private Financing Advisory Network, the United States Export-Import Bank, or other finance opportunities such as local commercial financial institutions and investors.
- Ensure that the program increases the relative involvement of women-owned or managed enterprises in energy efficiency activities.

The following work streams are envisioned during Year 1:

Task 2.1.1 Evaluate incremental costs and energy efficiency potential associated with buildings that comply with Vietnam's new building code.

The purpose of this work stream is to develop information tailored to Vietnam's building sector that will facilitate widespread compliance with the building code[2] by demonstrating the economic viability of constructing code-compliant buildings. The evaluation will help make the business case for project developers to comply with the code through the following activities:

- Work with project partners as well as other key stakeholders (e.g., Ministry of Construction, International Finance Corporation, Energy Conservation Centers in Hanoi and Ho Chi Minh City, and the Vietnam Green Building Council) to perform a modeling exercise that calculates:
    - average (or a range of) construction costs for typical residential and commercial buildings that comply with the revised building code in major Vietnamese cities, compared to the cost of a building using traditional construction methods as a baseline;
    - potential annual energy savings estimates for code-compliant buildings in Vietnam, compared to the annual energy use in traditionally constructed buildings; and
    - based on these calculations, an average payback period for building efficient (code-compliant) buildings, as well as a life-cycle estimate of average energy and cost savings over their lifetimes.
- Summarize the findings in a report, as well as other materials (e.g., PowerPoint presentations, one-page summary documents) for use in making the business case to stakeholders.

Deliverables/Results and Timing

1. Report on evaluation of incremental costs and EE potential of code-compliant buildings – May 2013
2. Summary materials highlighting major findings from the report – June 2013

Task 2.1.2 Develop Buildings Sector Energy Efficiency Action Plan

The United States Agency for International Development's Vietnam Clean Energy Program team will support the Government of Vietnam to develop a *Buildings Sector Energy Efficiency Action Plan,*

[2] The final approval of the building energy code still resides with the Ministry of Construction, but that approval is expected during the first year of the project.

which will build on previous and current Government of Vietnam and donor-led building Energy Efficiency policies and programs, and will include discussion of:

- Vietnam's revised national building code status, and compliance and enforcement needs;
- Strategies for ensuring compliance with the code, including phased approaches;
- Strategies for code enforcement;
- Options for a voluntary program for buildings that either do not fall under the building code criteria (e.g. /public sector[3] buildings or commercial buildings that do not meet the minimum floor area prescribed by the code) or go beyond code requirements (i.e., highly efficient building options);
- "Beyond code" incentives and recognition programs (e.g., Leadership in Energy and Environmental Design, LOTUS); and
- Financing needs and issues.

The draft report will be developed by the project team in consultation with key government Ministries as well as the Vietnam Green Building Council, and will be circulated to a wide range of government and expert stakeholders for review. In addition, the preliminary findings of the report will be discussed during a July 2013 workshop with project developers and representatives of financial institutions (see Task 2.1.3). Based on this feedback, the report will be revised and finalized by the end of Year 1, in preparation for its dissemination through a variety of media channels during Year 2.

Deliverables/Results and Timing

1. Draft Buildings Sector Energy Efficiency Action Plan – July 2013
2. Final Buildings Sector Energy Efficiency Action Plan – August 2013

Task 2.1.3 Raise awareness of project developers regarding building code requirements, energy savings potential from Energy Efficiency in buildings, and designing bankable projects

The purpose of this task is to convene buildings sector stakeholders (e.g., construction companies and other project developers, investors and financial institutions) in a series of workshops throughout the project to discuss on-going Vietnam Clean Energy Program activities related to building energy efficiency, solicit input on related issues, and raise awareness about the issues related to the building code, energy efficiency, and designing bankable projects. This task will also provide guidance for the project developers.

This first workshop will be designed in coordination with Enerteam and the Vietnam Green Building Council with the aim of raising awareness and soliciting feedback on the draft Buildings Sector Action Plan, in particular on issues and requirements for bankable projects, in order to provide input into Task 2.1.4 (*Enhance access to financing for Energy Efficiency projects*).

Deliverables/Results and Timing

1. Workshop on Buildings Sector Action Plan – July 2013

[3] Public sector buildings are not included in the new building energy code; however, leadership by example (by the government sector) is a powerful tool that can transform a market. A voluntary program to build new code compliant government buildings can be seen as a leadership position that will pave the way for others to follow.

Task 2.1.4. Enhance access to financing for Energy Efficiency projects

The purpose of this work stream is to enhance project developers' access to financing for energy efficiency projects (e.g., construction of highly efficient buildings, Energy Efficiency building retrofits); this task will be continued throughout the project. The goals of the task will be accomplished by working with financial Institutions, the Ministry of Finance, the Ministry of Natural Resources and the Environment, and the Ministry of Planning and Investment to:

- raise awareness and build capacity among project developers to take advantage of existing financing mechanisms and resources (e.g., the Private Financing Advisory Network);
- provide training to project developers in designing bankable projects;
- improve understanding in the financial community of potential cost savings resulting from energy efficiency; and
- explore options for the creation of a new financial mechanism to enhance access to financing for energy efficiency projects.

During the first year, efforts will focus on researching and preparing a report outlining the current situation in Vietnam with regard to available financing mechanisms, and identifying needs and opportunities for improving access to appropriate financing for energy efficiency projects. The report will be based on discussions and workshops with Government of Vietnam contacts, donors, investors, financial institutions and project developers.

Deliverables/Results and Timing

1. Status report and needs assessment on financial mechanisms for Energy Efficiency in Vietnam – August 2013

Task 2.1.5. Carry out Energy Efficiency building demonstration projects

The project team will work with local project partners (e.g., Enerteam and local architectural institutes) – as well as with developers and private sector suppliers of energy efficient equipment -- to design and carry out demonstration projects showing how buildings can cost effectively achieve compliance with Vietnam's revised building code, and to disseminate the results of these projects through a variety of channels. The project team will consider demonstration projects that showcase "beyond code" efficiency in the later years of the project.

During Year 1, the Vietnam Clean Energy Program team will aim to design two demonstration projects, one in a commercial building (new construction) and one in a public sector building (retrofit), starting with the selection of likely project sites and a feasibility study for each of the sites. The team will aim to carry out one feasibility study in Ho Chi Minh City (in partnership with Enerteam) and one in Hanoi.

In addition to collaborating with developers and private sector equipment suppliers, the project team will select the project sites and prepare the feasibility studies in consultation with Ministry of Industry and Trade, Ministry of Construction, the International Finance Corporation, and the Vietnam Green Building Council, and with the Energy Conservation Centers in Ho Chi Minh City and Hanoi.

Deliverables/Results and Timing

1. Report on selection of Year 1 project sites and design of feasibility studies – September 2013

Task 2.2: Pilot Market Incentive Programs for Energy Efficiency Practices

The requirement for this task is to help develop incentive mechanisms for energy efficiency practices, and to ensure that one or more of these mechanisms is demonstrated at the national or local level to support the economic fundamentals of energy efficient buildings projects.

The Vietnam Clean Energy Program team will assess the lessons learned from recent the Vietnam Energy Efficiency Program's pilot programs and then, with input from Government of Vietnam and Energy Efficiency Buildings Sector Advisory committee, will design complementary pilots to demonstrate market-based incentives for widespread improvements in building energy efficiency. The following work streams are envisioned during Year 1:

Task 2.2.1 Assess existing building Energy Efficiency incentive mechanisms supported by Government of Vietnam

The purpose of this work stream is to outline and evaluate the success of past and current Government of Vietnam market incentive programs for building energy efficiency and to prepare a Gap Analysis that identifies areas of opportunity for piloting new or additional incentive programs. The project team will carry out this assessment in collaboration with Government of Vietnam Ministries (Ministry of Industry and Trade, Ministry of Finance, Ministry of Construction, Ministry of Planning and Investment, Electricity of Vietnam), the Vietnam Green Building Council, Vietnam Association of Architects, Hanoi Department of Construction, Ministry of Natural Resources and Environment, and the German Association of Consulting Engineers.

Deliverables/Results and Timing

1. Building Market Incentive Program Gap Analysis – March 2013

Task 2.2.2 Develop recommendations for improving incentive mechanisms for building Energy Efficiency Practices

Building on the Gap Analysis prepared under Task 2.2.1, the United States Agency for International Development's Vietnam Clean Energy Program team will develop recommendations for improving incentive mechanisms for building Energy Efficiency Practices in Vietnam, for submission to the Government of Vietnam in order to provide guidance for the demonstration of one or more pilot incentive programs. Incentive activities could include the following:

- Electricity of Vietnam could offer incentives for building retrofits and new building construction that meet building code standards (or exceed them, e.g., earning LOTUS or Leadership in Energy and Environmental Design efficiency certifications) by offering lower electricity connection fees, priority supply during shortages, and/or preferential tariffs for a fixed period.
- Ministry of Construction (and the city- and ward-level Departments of Construction and Peoples Committees) could offer streamlined permit approval for buildings meeting high efficiency standards.

The United States Agency for International Development's Vietnam Clean Energy Program team will draft the recommendations report and will solicit feedback on the draft at a stakeholder workshop involving the key Government of Vietnam Ministries, the Vietnam Green Building Council, the Vietnam Association of Architects, the Hanoi Department of Construction, and other stakeholders. The revised report will be completed during Year 1, in preparation for its dissemination to key stakeholders through a variety of channels during Year 2 and the development of a pilot incentive program in Years 2-3.

Deliverables/Results and Timing

1. Draft report on potential incentive mechanisms – April 2013
2. Stakeholder workshop to solicit feedback on draft report – June 2013
3. Final report – September 2013

Task 2.3: Demonstrate Energy Demand Management and End-Use Efficiency Practices and Technologies

The requirements for this task are to:

- Demonstrate demand-side energy management practices and technologies (initially focusing on building energy use management and the rational use of energy) through partnerships with electric power companies, private companies and/or government institutions.
- Engage public sector staff so that they can understand the approaches and their potential.
- Engage with national government and business audiences to encourage wider uptake of these approaches.

The 2010 World Bank evaluation report recommended that, in the absence of a new regulatory scheme requiring end-use efficiency, additional demand-side management efforts are needed to reduce peak load throughout the entire electric system of Vietnam and should reflect lessons from those implemented by Electricity of Vietnam and the Energy Regulatory Authority of Vietnam since 2000. The World Bank reports also noted that the "most basic requirement" for achieving greater energy efficiency in Vietnam is for energy users to be aware of potential energy savings and their financial benefit. The 2009 Asia-Pacific Economic Cooperation council Peer Review of Energy Efficiency mission in Vietnam also concluded that the lack of public awareness is one of the major barriers to energy efficiency in the country.

To address these issues, United States Agency for International Development's Vietnam Clean Energy Program Task 2.3 will focus on strengthening both energy demand management programs (to lower demand for power at peak periods and minimize outages) and end-use energy efficiency practices in Vietnam. The following work streams are envisioned during Year 1:

Task 2.3.1 Review results of implemented demand-side management and end-use energy efficiency programs

The purpose of this work stream is to review the results of implemented demand-side management and end-use energy efficiency programs in the commercial, public, and residential sectors, and to develop recommendations for next steps to improve these efforts. Programs evaluated will include Phase I of the Government of Vietnam demand-side management program, Vietnam Energy Efficiency Program education and information dissemination efforts, and demand-side management and energy efficiency programs led by the World Bank and other donors.

The review and recommendations report will be developed in consultation with the Energy Efficiency Buildings Sector Advisory Committee, Ministry of Industry and Trade, Enerteam, Energy Regulatory Authority of Vietnam, Electricity of Vietnam, and the Institute of Energy, and the preliminary results will be discussed at a stakeholder coordination meeting in order to obtain feedback for the development of the *Road Map for Demand-side Management and End-use Energy Efficiency* (Task 2.3.2).

Deliverables/Results and Timing

1. Report on Implemented Demand-side Management and Energy Efficiency programs with recommendations for next steps – April 2013
2. Stakeholder coordination Meeting – June 2013

Task 2.3.2 Develop Road Map for Demand-side Management and End-use Energy Efficiency
The purpose of this task is to build on the results and recommendations of the Demand-side Management/Energy Efficiency program review (Task 2.3.1) and develop a Road Map for Demand-side Management and End-use Energy Efficiency in Vietnam. The Road Map will be developed in consultation with the Ministry of Industry and Trade, Electricity of Vietnam, the Energy Regulatory Authority of Vietnam and other key Government stakeholders, and will be coordinated with the Second Phase of the Government of Vietnam's demand-side management program. The Road Map will be completed by the end of Year 1 in order to provide direction for the development of new initiatives during the remainder of the project.

The Road Map will include guidance on three proposed USAID Vietnam Clean Energy Program's activities:

- National-level demand-side management (e.g., peak load reduction, time of day pricing) pilot program
- Demonstration of end use energy efficiency in a local public sector facility (e.g., water utility)
- Public awareness campaign to enhance understanding of Vietnam's energy efficiency label for appliances and equipment (starting Year 2)

Deliverables/Results and Timing
1. Road Map for Demand-side Management and End-use Energy Efficiency – July 2013

Task 2.3.3 Design national level demand-side management pilot with Electricity of Vietnam
The purpose of this task is to work with Electricity of Vietnam to develop a detailed design for a national-level demand-side management pilot program, based on the Road Map developed under Task 2.3.2, for implementation starting in Year 2.

During the later years of the project, the Vietnam Clean Energy Program team will assist Electricity of Vietnam in the implementation of the approved pilot program, ensuring strong participation of local authorities and power companies in carrying out substantial outreach and awareness activities to promote the program. Successful results will be disseminated as best practices to other cities and regions.

Deliverables/Results and Timing
1. Demand-side management pilot program design – September 2013

Task 2.3.4 Demonstrate end-use energy efficiency in a public sector facility (e.g., water utility) in Hanoi or Ho Chi Minh City
The purpose of this work stream is to design and carry out a demonstration of end-use energy efficiency in a local public sector facilities, likely a the water utilities in Hanoi or Ho Chi Minh City, in order to highlight the potential for such energy efficiency measures to reduce peak electricity loads as well as reduce energy consumption.

The selection of a water utility for the site of this demonstration project is based on the high energy intensity of water utilities, and the extensive experience of the United States Agency for International Development's Vietnam Clean Energy Program's project team in achieving significant (25% or more) energy savings in water utilities throughout the world through low-cost technical and

managerial changes – which pay for themselves in periods as short as a few months to several years. Working with the Energy Conservation Center, People's Provincial Committee and water supply agencies in the selected city, the United States Agency for International Development's Vietnam Clean Energy team will develop a work plan for the demonstration project, carry out an energy and water audit and recommend measures to improve efficiency, implement the short-term measures, and prepare a report on the preliminary results (energy and water savings) from the project. The report on the preliminary results will also discuss the applicability and potential of the international Standards Organization 50001 Energy Management Standard for achieving long terms savings in such facilities in Vietnam.

Deliverables/Results and Timing

1. Work plan for demonstration projects in Hanoi/Ho Chi Minh City water utility – March 2013
2. Energy and water audit from selected utility, with recommended measures – May 2013
3. Report on preliminary results from implementation of recommended measures – September 2013

Task 2.4: Enhance Professional Technical Capacity Related to Energy Efficiency Practices

The requirements for this task are to:

- Build the capacity of Vietnamese professionals (e.g., energy services providers, building managers, architects, engineers, construction managers, investors, and lenders) in the evaluation and implementation of energy efficiency measures; and ensure that the proportion of women with energy efficiency skills is increased relative to men.
- Establish mechanisms for the sustained provision of necessary trainings (for current professionals as well as students) after the end of the contract period, through partnerships with local universities or [4]training centers.

The United States Agency for International Development's Vietnam Clean Energy Program team will determine the specific training needs related to energy efficiency in buildings (including topics that support compliance with and enforcement of building codes) that are not met by existing training programs, and will design a sustainable training program that meets these needs in partnership with a university or other training institution. The selected institutional partner will host the training program; the United States Agency for International Development's Vietnam Clean Energy Program will work closely with the partner to design the program, secure any necessary government approvals and seek sustainable financing, develop the training modules, and carry out a number of trainings (the number to be agreed between the Vietnam Clean Energy Program team and the selected institutional partner). The Energy Efficiency Buildings Sector Advisory Committee will facilitate trainee identification.

The following work streams are envisioned during Year 1:

Task 2.4.1 Ministry of Planning and Investment le information on existing training courses related to building energy efficiency

The purpose of this task is to determine unmet training needs in Vietnam related to building energy efficiency – particularly on topics related to building code compliance and enforcement. The project team will catalogue the available training courses related to building energy efficiency in the major cities (e.g., by Ministry of Industry and Trade, Institute of Tropical Architecture and other

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universities, Schneider Electric and other companies), and will prepare a report describing identified gaps in available training.

Deliverables/Results and Timing

1. Report on available training courses related to building Energy Efficiency in major cities in Vietnam, and evaluation of unmet training needs – April 2013

Task 2.4.2 Select partner institution for training program

The United States Agency for International Development's Vietnam Clean Energy Program team will work with the Ministry of Industry and Trade and the Ministry of Construction to develop criteria for selecting a university or other institution with which to partner in developing an enhanced building energy efficiency training program. The United States Agency for International Development's Vietnam Clean Energy Program team will then identify interested institutions, and select one based on the established criteria. The partnership will be formalized pending approval from the Government of Vietnam.

Deliverables/Results and Timing

1. Criteria for selecting institution for training program partnership – August 2013
2. Report on selection process and results – August 2013

Task 2.4.3 Develop outline of training program

The purpose of this task is to develop an outline of the proposed training program, in collaboration with the selected institutional partner, based on assessed needs. Aspects of the program design to be addressed in the outline include:

- Topics (e.g., aspects of building code compliance and enforcement, architectural design for highly efficient buildings, financing strategies, developing bankable projects, energy auditing)
- Targeted audience (e.g., Government of Vietnam and local officials responsible for building code enforcement, project developers, building managers, investors, lenders)
- Type of training courses (e.g., Academic , Commercial)
- Roadmap for obtaining key support (i.e., approval from Ministry of Education and Training for academic curricula, and sustainable business plans for commercial short courses)

Deliverables/Results and Timing

1. Outline of training program – September 2013

Task 2: Increase Energy Efficiency in High Energy Use Sectors

Year 1 Work Plan: January – September 2013

Summary Table

Activity	Sub-Activity	Deliverables	Due Date	Partners (Bold = Key partners)
General	Develop, manage, and convene Building Sector Advisory Committee (BSAC)	• Definition of role/function of BSAC • List of proposed BSAC members • List of agreed BSAC members • Minutes from first BSAC meeting	• February 2013 • March 2013 • June 2013 • August 2013	**Nexant, Enerteam**
General	Vietnam Energy Efficiency Policy and Program Review	• Updated report on current EE policies and programs, including analysis of constraints and opportunities	• February 2013	**Enerteam, SRC Global** MOIT, MOC, IFC, ITA
Task 2.1 Demonstrate Models of Economically Viable Energy Efficiency Projects	(i) Evaluate incremental costs and EE potential associated with buildings that comply with building code	• Report on evaluation of incremental costs and EE potential of code-compliant buildings • Summary materials highlighting major findings from the report	• May 2013 • June 2013	**Nexant, MOC, IFC,** BSAC, ECC Hanoi, ECC HCM, MOIT, VGBC, Enerteam, ITA
	(ii) Develop Buildings Sector Energy Efficiency Action Plan	• Draft Buildings Sector EE Action Plan • Final Buildings Sector EE Action Plan	• June 2013 • August 2013	**Enerteam, SRC Global, VGBC,** BSAC, MOIT, MOC, ITA, IFC

Activity	Sub-Activity	Deliverables	Due Date	Partners (Bold = Key partners)
	(iii) Raise awareness of project developers regarding building code requirements, energy savings potential from EE in buildings, and designing bankable projects	• Workshop on Buildings Sector Action Plan	1. July 2013	**Enerteam, SRC Global, VGBC**, Nexant, BSAC, financial Institutions, construction companies and other project developers
	(iv) Enhance access to financing for EE projects	• Status report and needs assessment on financial mechanisms for EE in Vietnam	• August 2013	**Financial Institutions, Nexant, MOF, MPI,** BSAC, Enerteam, construction companies and other project developers
	(v) Carry out EE building demonstration projects	• Report on selection of Year 1 project sites and design of feasibility studies	• September 2013	**ITA, Enerteam,** ECC Hanoi, ECC HCM, MOIT, MOC, IFC, and VGBC
Task 2.2 Pilot Market Incentive Programs for Energy Efficiency Practices	(i) Assess existing building EE Incentive mechanisms supported by GVN	• Building Market Incentive Program Gap Analysis	• March 2013	**SRC Global**, MOIT, MOF, MOC, Ministry of Planning and Investment (MPI), EVN, VGBC, Vietnam Association of Architects (VAA), Hanoi Department of Construction (DOC), Ministry of Natural Resources and

Activity	Sub-Activity	Deliverables	Due Date	Partners (Bold = Key partners)
				Environment (MONRE), German Association of Consulting Engineers
	(ii) Develop recommendations for improving incentive mechanisms for building EE Practices	• Draft report on potential incentive mechanisms • Stakeholder workshop to solicit feedback on draft report • Final report	• April 2013 • June 2013 • September 2013	**SRC Global, Enerteam,** BSAC, MOIT, MOF, MOC, MPI, EVN, ERAV, VGBC, VAA, Hanoi DOC, MONRE
Task 2.3 Demonstrate Energy Demand Management and End-Use Efficiency Practices and Technologies	(i) Review results of implemented DSM and end-use EE programs	• Report on Implemented DSM and EE programs with recommendations for next steps • Stakeholder coordination Meeting	• April 2013 • June 2013	**SRC Global, Enerteam,** ERAV, EVN, IE, Power Companies, MOIT
	(ii) Develop *Road Map for Demand-side Management and End-use Energy Efficiency*	• Road Map for Demand-side Management and End-use Energy Efficiency	• July 2013	**SRC Global, Enerteam, ERAV, EVN**, IE, Power Companies, MOIT
	(iii) Design national level demand-side management pilot with EVN	• Demand-side management pilot program design	• September 2013	**SRC Global, ERAV, EVN, Enerteam**
	(iv) Demonstrate end-use energy efficiency in a public sector facility (e.g., water utility) in Hanoi or Ho Chi Minh City	• Work plan for demonstration project in Hanoi/HCM City water utility • Energy and water audit from selected utility, with recommended measures • Report on preliminary results from implementation of recommended measures	• March 2013 • May 2013 • September 2013	**Enerteam, Energy Conservation Centers (Hanoi and HCM City) and People's Provincial Committees**

Activity	Sub-Activity	Deliverables	Due Date	Partners (Bold = Key partners)
Task 2.4 Enhance Professional Technical Capacity Related to Energy Efficiency Practices	(i) Compile information on existing training courses related to building energy efficiency	• Report on available training courses related to building EE in major cities in Vietnam, and evaluation of unmet training needs	• April 2013	**ITA, Enerteam, Hanoi University of Construction (HUOC),** Schneider Electric , MOIT
	(ii) Select partner institution for training program	• Criteria for selecting institution for training program partnership • Report on selection process and results	• August 2013	**ITA, HUOC, Enerteam** IFC, MOC, MOIT
	(iii) Develop outline of training program	• Outline of training program	• September 2013	**ITA, HUOC, Enerteam** IFC, MOC, MOIT

Task 3 (Sub-IR 2.3): Increase public and private investment in and piloting of renewable energy technologies

The purpose of Task 3 is to increase public and private investment in and piloting of renewable energy technologies through a supportive renewable energy policy framework, demonstration pilot systems of Renewable Energy (RE) technologies as well as through the introduction of technical and financial opportunities for development and investment of renewable energy in Vietnam. This task will be led by Winrock International, with support from SNV Vietnam, Full Advantage, and Nexant.

Approach and methodology

The Winrock team's overall approach will be to raise awareness among policy makers to create a supportive policy framework and provide support to the public and private sector to encourage the development of actual projects and to increase investment in renewable energy.

Winrock will accomplish Task 3 goals by:

- surveying and assessing the potential of renewable energy resources, especially biomass resources, biogas, waste to energy and solar potentials
- developing feasibility study (FS) for renewable energy projects
- setting up demonstration schemes, with priority is given to stand alone power supply schemes to the poor off-grid communities based on renewable energy technologies
- creating channels of cooperation between renewable energy project developers and financiers, that helps renewable energy developers access preferential financing sources
- organizing training courses for RE technological and financial investors to support them to enhance their capacity in identifying, assessment and evaluation of investment opportunity in renewable energy
- creating opportunities for women to participate actively in the development of renewable energy market in Vietnam; and
- supporting the development of a policy framework to encourage and facilitate private and public investment in renewable energy.

This work will be directed by the Task Leader, Dang Dinh Thong, with assistance from task 3 advisers.

Scope of work

The scope of work for Task 3, Year 1 is defined in the following three main tasks:

Task 3.1- Identify economically viable RE projects for developers

This task aims to provide opportunities for public and private investors to invest in renewable energy projects. It includes the following activities:

- Conduct surveys and prepare feasibility study reports on renewable energy projects with high technological and financial feasibility
- Build up networking linkages between renewable energy project developers and financiers within Vietnam and from abroad (such as banks, credit funds for development and environmental protection, etc.) to help developers gain access to preferential financial schemes to realize the proposed renewable energy projects

- Enhance knowledge base for the Renewable Energy investors to enhance their capacity in analysis and evaluation of the technological and economic feasibility of renewable energy projects proposed for investment.

First Year Work Plan

In the first year of the USAID Vietnam Clean Energy Program, Task 3 consists of the following activities:

3.1 Conducting surveys to assess the biomass resource potentials for three renewable energy resources including (i) rice husk, (ii) bagasse and (iii) wood waste

3.2 Investigating and surveying to formulate two renewable energy project feasibility study reports

3.3 Organizing training courses on biomass, biogas, waste to energy and solar technologies for staffs in the Renewable Energy enterprises

3.4 Organizing training courses on biomass, biogas, waste to energy and solar technologies for relevant staffs from potential participating banks

3.5 Organizing a Workshop sharing the achieved results.

Deliverables/Results and Timing

1. Bagasse Resource Assessment Report - May 2013
2. Rice Husk Resource Assessment Report – July 2013
3. Wood waste Resource Assessment Report – September 2013.
4. Feasibility study to provide electricity for 97 rural remote households of Ethnic Cham by a solar photovoltaic system of about 50 kW with 20kW diesel back up in San Thanh commune, Bac Binh district, Binh Thuan Province – April 2013.
5. Rice husk for cogeneration feasibility study in Can Tho province – June 2013.
6. Training courses for renewable energy developers in Ho Chi Minh City and some Southern provinces – April 2013
7. Training for financial institutions on lending for biomass, biogas technologies - May 2013
8. Workshop to present results of studies - August 2013

Task 3.2- Support policy framework for RE to facilitate private sector investments

Winrock will support the development and implementation of policies to create an environment at the national and local level to encourage increased public and private investment in the field of renewable energy;

Winrock will monitor and inspect the implementation of policies, identify problems during the implementation and the need for corrections to adjust the policies to create a favorable environment for the development of the renewable energy market.

Task 3.3 Work Plan Year 1

To prepare the basis for the implementation of task 3.3 in Years 2, 3 and 4, Task 3.3 in the first year will focus on the following activities:

- Identification of off-grid communities

Specific tasks:

- Collect data of numbers of villages, communes, districts that has no plans to develop the grid
- Collect data on natural , social, economic conditions and energy demand for off-grid residential areas;
- Conducting surveys, additional surveys in a few selected areas to test and update data for a Rapid Assessment of potential Renewable Energy solutions for those off-grid communities.
- Investigation, survey to provide the Needs and Opportunities Assessment Report for off-grid electrification and improved cooking stoves in selective provinces in Vietnam.

This work is to be integrated into Task 3.2.2 above in Year 1 Work Plan.

Task 3.3 Deliverables/Results and Timing

3.3.1 Overview Report on the current off-grid villages, districts and their natural, social, economic conditions and their energy demand. Rapid Assessment Report of potential RE solutions for those off-grid communities.

Completion time: 8/2013.

3.3.2: see section 3.2.2

Task 3: Increase public and private investment in and piloting of renewable energy technologies

Year 1 Work Plan: January – September 2013

Summary Table

Activity	Sub-Activity	Deliverable	Due Date	Partners
3.1- Identify economically feasible RE projects for developers	(i) Survey to assess the potential of 03 biomass resources including rice husks, bagasse and wood waste;	(1) Rice husk Resource Assessment Report Vietnam 2013; (2) Bagasse Resource Assessment Report Vietnam 2013; (3) Wood waste Resource Assessment Report Vietnam 2013;	July/2013 May/2013 Sept./2013	IE, GDE's RE Department DOITs, MARD's Information and Statistical Center, MOIT's Department of Local Industries, sugar mills, rice mills, furniture, wood processing factories,….
	(ii) Investigation, survey and set up of 2 renewable energy project feasibility study (FS) reports	(1)- FS Report on San Thanh PV-diesel Project, Bac Binh District, Binh Thuan Province. Project proposes to electrify 97 rural households of Cham Ethnic Minority by a 50 kW photovoltaic system with 20kW diesel back up (2)- FS Report on Substitution Coal by Rice Husk at Tra Noc 7 MW Co-generation Facility, Can Tho province	April / 2013. June/2013.	IE, People Committee San Thanh Commune, Bac Binh District, DOIT Binh Thuan. Management Board of Tra Noc Industrial Zone, DOIT Can Tho, IE and GDE.

Activity	Sub-Activity	Deliverable	Due Date	Partners
	(iii) Organizing training courses on biomass, biogas, waste to energy and solar technologies for staffs in the RE enterprises;	Training courses for staffs of RE enterprises for expected 50-60 people from renewable energy enterprises in Ho Chi Minh City and some Southern provinces, 3-4 days time.	April-May / 2013.	HUST, IES, IE, Ho Chi Minh City Electricity College, DOST Da Nang EEC Centre, SNV
	(iv) Organizing training courses on biomass, biogas, waste to energy and solar technologies for project appraisal staffs from potential banks.	Training courses on biomass, biogas technologies for the staff of 04 of potential participating banks. Expected 50-60 people, time 3-4 days in Hanoi	May-June / 2013	AGRD-Bank, BIDV, Vietinbank, Eximbank, SNV
	(v) Workshop on report the achieved results.	Workshop, 1 Day; about 50 persons	August/2013	USAID, VCEP, the partners and agencies to coordinate the implementation of the above tasks;
3.2- Support policy framework for RE to facilitate private sector investments	(i)Study to set up an overview of the current status of the energy price mechanism feed-in tariff (FIT) to support renewable energy technologies in the world and Vietnam	Overview report on the state of development and application FIT pricing mechanism, its impact on the development of renewable energy markets in a number of countries in the world and Vietnam; analyzes the advantages and problems need to adjust.	May / 2013.	GDE, IE, IES.

Activity	Sub-Activity	Deliverable	Due Date	Partners
	(ii)- Carry out survey, assessment of needs and opportunities (N&O) for off-grid electrification and improved cooking stoves.	Report on results of survey, assessment of needs and opportunities for off-grid electrification and improved cooking stoves.	July / 2013.	EVN, MOIT's Department of local Industries , IE, IES, DOIT selected provinces
3.3- Assist off-grid poor communities in gaining access to RE	(i)- Identification of off-grid communities	Report on the off-grid villages, districts and their natural, social, economic conditions and energy demand of the studied villages, communes and districts. Rapid Assessment Report of potential RE solutions for those off-grid communities	August/2013	EVN's Department of Business and Rural Electrification, MOIT's Department of local Industries, DOIT mountainous provinces, the island District, IES, IE, SNV

Cross-Cutting Activities

Communications

For the first year of the USAID Vietnam Clean Energy Program, the Communications Unit shall provide for both the internal and external communication needs of the Program. In addition to the regular communication requirements sent out to Program partners, the Communications unit shall perform three functions: (1) Provide marketing support to Program Technical Units; (2) Lead implementation of activities that would highlight and promote Program achievements; and (3) Provide support to the Chief of Party in Program's partnership development efforts.

The Communications Unit shall focus on creating outreach activities which introduce the Program's objectives and expected outcomes to its partners and target audiences. Administrative and marketing materials have been in the creating process which are guided and approved by USAID. A kick-off event will be held in March or April of 2013 to create public awareness of the program. Key partners, media and representatives of the Program's target audiences will be invited. Program brochure and welcome corner/package for visitor will be developed to disseminate and to raise the program image/profile.

The Communications Unit, together with other technical units, shall contribute continuously into a Program databank which contains all marketing materials, publications, images, video, and other resources in hardcopy and softcopy for documentation and further use of marketing purposes.

Other communications activities including quarterly Newsletter, ad-hoc technical materials for different audience will be developed in cooperation with the Program partner as requested by Sub-component units. Communications unit is now working with Renewable Energy team to create a small handbook with children-friendly voice for primary school student in the coming months. Social media (Facebook, Twitter) account of the Program has been created and updated weekly to strengthen the outreach channel to public.

Description	Timeframe	Audience	Medium	Frequency	Responsibility
Administrative materials (business card, envelopes, letterhead, email signature…)	Jan 2013	Program staff	Printed for internal use	Ongoing	Comm manager
Program introduction brochures, working map	Apr 2013	Public	Printed materials (leaflet, brochures…)	Updated every year as needed	Comm manager and Sub-IRs component leaders
Quarterly newsletter that includes project updates, images, activity stories, upcoming events	Jun 2013, Sep 2013	Staff, public	Electronic copy to be disseminated by email	Quarterly	Comm manager and DCOP, Sub-IRs leaders
Program kickoff event	Apr 2013	Public	Event at programmatically meaningful location for partner, representative, target audience unit and media	One time	Comm manager, COP, and Admin group
Develop Social media tools for outreach (FB,Twitter)	Feb 2013	Public	Online social media pages on major networking platforms such as Facebook and Twitter.	Updated frequently (weekly)	Comm manager and M&E manager
Renewable Energy handbook	Mar 2013	Primary school student	Printed handbook	Once	Comm manager and RE Manager
Contact list	Frequently	Program staff	Internal use	Updated everyday	Comm manager and Admin group
Databank	Feb 2013	Comm manager and Program Staff	To be kept in Server and shared upon request	Updated weekly	Comm manager and M&E manager

Gender Mainstreaming

Women occupy many important roles in Vietnam's economy. They are active in commerce and trade, but are under-represented in the energy sector. For instance, of the 1300 enterprises in the domestic biogas program, only 1% of the masons and company managers are women. The VCEP Team will recruit women as entrepreneurs and as participants in policy making and planning discussions. Specific trainings and assistance will include or directly benefit women. Gender considerations will inform program activities related to accessing finance for adoption of energy efficient technologies and equipment and for energy enterprise finance. The VCEP Team will promote and implement gender mainstreaming in all of its activities across three tasks. A Vietnamese gender baseline survey will be conducted within the first half of Year 1.

IV. Anticipated Challenges

The Program requires approval by the Ministry of Planning and Ministry of Industry and Trade, a process that may take anywhere from three to twelve months. The initial draft application was submitted on behalf of USAID to the Ministry of Industry and Trade on January 2, 2013 in accordance with Government Decree 131. While USAID and the Program will do everything in their power to expedite the process, it will be difficult for us to work with a number of our government counterparts during this approval process, which may delay implementation of many activities requiring government involvement in this Work Plan.

Schedule of Deliverables

Following is a schedule of the projected major deliverables for the First Year of the USAID Vietnam Clean Energy Program: